

WESTERN MINING NEWS IN BRIEF

Western Newspaper Union News Service.
Metal Market Values.

Lead, New York, \$1.90.
Bar silver, 46 1/2.
Spelter, St. Louis, \$12.45.
Copper, casting, \$17.12 1/2.

CRIPPLE CREEK OUTPUT.

Increase for August Over July Is Reported as \$114,579.

Cripple Creek, Colo.—The mines of Cripple Creek district for August produced \$1,800 ton of ore with an average value of \$14.65 per ton, and a gross bullion value of \$1,242,264. As compared with July, the increase is reported in tonnage as 1,750 tons, and in value \$114,579.

The Portland Gold Mining Company, at its three plants, one in Colorado Springs and two in this district, treated no less than 41,100 tons of ore of a valuation of from \$2.59 to \$21 per ton, and an aggregate value of \$295,864.

The figures as reported out from the several treatment plants are as follows:

Golden Ceele,	Tons.	Average Value.	Gross Value.
Colo. Springs...	25,800	\$19.60	\$722,000
Portland, Colo...	18,200	21.00	239,500
Smelters, Denver...	4,900	22.00	220,000
and Pacific...	1,900	23.00	220,000
Portland, Idaho...	19,600	2.55	50,784
Idaho...	11,600	2.50	24,600
Idaho...	200	4.00	2,400
Idaho...	1,000	1.60	1,600
Totals...	84,800	\$14.65	\$1,242,264

Arizona.

The milling plant for the tungsten mines, twelve miles east of Yuma, is to soon be in commission. The mines show good bodies of milling ore.

At the Old Dominion smelter at Globe, production is being maintained at the rate of fifty tons per day, or 3,000,000 pounds per month. Three furnaces are running.

Thirty-five feet of pay milling ore sums up the breadth and value of the strike made recently in the Black Eagle workings of the Tom Reed Gold Mines Company at Gattman.

While strikes of rich mineral are being reported from all sections of Mohave county, the wonderful strike of molybdenite ore in the Levathan mines, in Copper Canyon, must not be overlooked.

New Mexico.

The Hop Canyon mine district, five miles south of Magdalena, is booming. Moore and Wolf, who are operating the Black Cloud mine, are shipping heavily at the present time.

The smelter at Socorro, recently taken over by California capitalists, assures extensive development of the mines in that part of the state.

W. W. Slate and C. F. Henley have leased several thousand acres of land in Quay and Roosevelt county and are preparing to do extensive prospecting for oil.

In 1914 the production of metals from New Mexico mines, according to Charles W. Henderson of the United States Geological Survey, showed an increase in gold, silver, copper and zinc, and a decrease in lead. The mine output of gold was \$1,171,695, an increase of \$289,770; of silver, 1,777,445 ounces, an increase of 146,172 ounces; of copper, 59,207,925 pounds, an increase of 2,999,219 pounds; of lead (figured as lead in lead bullion and lead in leaded zinc oxide), 1,754,541 pounds, a decrease of 2,182,723 pounds; and of zinc (figured as spelter and zinc in leaded zinc oxide), 18,403,292 pounds, an increase of 1,880,231 pounds.

Wyoming.

T. A. Harris reports that Ed. Good of Thermopolis, who has a 200-barrel well at that place, visited the Laramie Oil Development Company's property and was very favorably impressed.

The French capitalists who are interested in the Midwest Oil Company in Wyoming have all been on the firing line and are either at the front now or are in the hospital recovering from wounds.

The Drayton-Good Oil Company, operating in the Grass Creek field, near Thermopolis, brought in a gusher at the depth of 1,850 feet. Over 1,200 feet of oil stands in the well after the run-off. The oil is high grade. The location of this well is outside of the escapement described by geologists, and as the big flow of oil was encountered at great depth, and as the drill passed through sands at the 1,000 and 1,200-foot level, in which wells have been brought in in the main field, the fact is now demonstrated that oil may be found where there are no geological indications.

Colorado.

The Keller & Bright mines in Ouray county are making a good showing as work progresses.

Machinery for the mill of the Gold Coin Mining and Reduction Company at Ouray has been purchased.

At Cripple Creek the Independence leasers are maintaining regular shipments of good grade ore and the output from this famous producer during the coming months promises to be heavier than at any time during the last several years.

HE HAD THE FEVER

Just What Ailed Farmer Hopkins Has Ailed Many of His Class.

JUST HAD TO HAVE AN AUTO

Wife Unnecessarily Worried Over the Somewhat Peculiar Actions of her Husband, Who Was Only Figuring Over Making a Change.

Farmer Hopkins had been ailing for some time. He did his chores in the customary manner one expected of a Hopkins. He paid as much attention to the drove of hogs over in the pasture lot, the Indianapolis News states. He followed the plow just as he had followed it for 25 years. He wore softly at times, mayhap, at the contrariness of old Ben as he went down between the rows of corn. After the day's work was over he milked the three Jerseys and bedded down the horses in his old painstaking manner. But with all of his thoroughness there was an air of preoccupation. The clean white boards of the barn door on the inside were covered with rows and rows of figures. His wife, going down there on her daily egg hunting expeditions had noticed the figures and wondered what they meant. Could it be that after all their years of married life her husband was engaged in some transaction which he wished to hide from her, that he should do his figuring on the barn door instead of the old-fashioned secretary in the living room?

She ran back over his actions of the last few weeks. She remembered how he had grumbled at Nellie as they rode to town behind her. Surely he could not think of selling her. He had always boasted of the trim little mare's speed, now he compared her to a snail.

The children had all married and moved away, and it seemed to the wife that he should be taking his life easy, instead of raking up trouble for himself as he seemed to be doing.

One evening when he had come back home from a drive to the town alone he seemed to be of a more cheerful mood. He told his wife the children were away all year and only got back in the summer. To go to see them meant a long ride to the town and a longer ride on the train. Then he abruptly shifted the conversation around to horses. Feed was high. Horses needed shoes; they were liable to be sickened and die. They must be fed whether they worked or not. They could not be driven hard in the hot sun. It always took a horse two hours at the least to make the 14 miles to town. At last the faithful wife was getting at the cause of her husband's preoccupation. Soon she would know what the real trouble was. Probably he wished to sell Nellie and get that 2.95 trotter he had been looking over at the county fair.

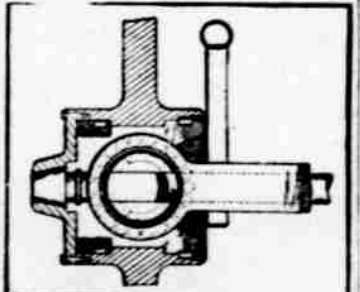
So—would she mind if he bought an automobile? They were so much cheaper now. They could get around so much more quickly to visit their friends and take their friends riding, etc., ad infinitum. In a half hour Mrs. Hopkins was so excited that she insisted on getting a catalogue the next day, and even began to look at a road map to see how they could go to see Jessie and the baby.

In two weeks one of the stalls had been torn out to make room for the car and a galvanized tank had been sunk in the ground just outside the barn door. And in his first driving lesson Farmer Hopkins learned that whereas when a plow is to be guided to the right pressure it must be guided on the left handle, when an automobile is to be guided to the right the steering wheel must be turned to the right. And gasoline isn't so high, after all.

MUST ROTATE WITH AXLE

Ingenious Mechanism That Makes Provision for Guiding the Wheels of a Vehicle.

In this case the object is to provide a mechanism for connecting the front wheels of the vehicle to the axle in such manner that while the wheels may move with respect to the axle to



Driving Mechanism For Automobiles and Like Vehicles.

guide the vehicle, they will yet be constrained to rotate with the axle to permit the four wheels of the vehicle to be driven from the motor—Scientific American.

Warps Valves.

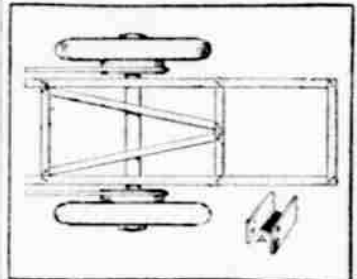
Simple loss of power is not the principal bad effect of leaking valves. The hot flame that escapes past the valve dampens the valve stems, softens the valve spring, corrodes the stem bearings and furnishes a sediment that clogs free action.

BRACES FOR THE AUTO

HOW STRAINED FRAME WAS PUT IN CONDITION.

Rear Portion of Machine That Had Become Damaged Made Practically as Good as New.

The frame of a light delivery wagon became badly strained from an accident, so badly, in fact, that some method of re-enforcing the rear portion of it became absolutely necessary. It was done in the following manner: Two channel pieces were riveted diagonally between the two cross members directly above the rear axle. The ends were cut out, as shown at A, so that the riveting was done in the upper and lower flanges only. It was surprising how rigid the frame became after these braces were in place. Contributed by Adolph Kline, New York City—Popular Mechanics.



Braces Put in the Rear Part of an Automobile Frame to Stiffen It After an Accident.

Finally between the two cross members directly above the rear axle. The ends were cut out, as shown at A, so that the riveting was done in the upper and lower flanges only. It was surprising how rigid the frame became after these braces were in place. Contributed by Adolph Kline, New York City—Popular Mechanics.

IS ONE SOURCE OF TROUBLE

Starting Battery Not So Considered by Many People, but Should Be Carefully Watched.

The starting battery in an automobile is a source of trouble that many people do not consider.

It is sometimes said that a little distilled water added to the battery every two or three weeks is all that is necessary to keep it in good condition. This statement is very misleading. Any electrician will tell you that the storage battery is a very particular part of the automobile equipment, and needs a great deal of attention.

Water alone will not keep the battery in good condition. The acid or electrolyte should be kept to a specific gravity test of 1.250 degrees.

On long runs, where the stops are few, it is possible to charge the battery as fast as it is discharged, but as a rule you are very apt to use the current faster than the battery is recharged. If this is continued any great length of time the battery will become too weak, starting will become quite impossible, and the battery will be damaged, making repairs a necessity. Battery repairs are expensive.

If the electrolyte is not kept to test mentioned, the battery will freeze in moderately cold weather, and the jar will be burst. It is claimed that with a full charge, and the electrolyte having a specific gravity test of 1.250 degrees, it is quite impossible to freeze the battery. But on a low charge and gravity test the electrolyte becomes distilled water, and is very easily frozen.

Automobile Highway.

Motorists throughout the country are watching with much interest the rapid progress which is being made in the construction of the automobile highway to the top of Pike's peak. The project is being financed by a group of Colorado Springs business men, and the road is being constructed under the supervision of the United States government. This wonderful highway will be 20 feet wide and have no grade of more than 10 per cent, and will be so safeguarded that any motorist may drive a machine to the summit without the slightest danger. The view of the top of Pike's peak, which is nearly three miles above the sea level, covers a wider area of territory than can be obtained from any other point in the world reached by automobile, a little over 60,000 square miles being visible to the naked eye. The route of this highway follows the general line of the old carriage road to the summit, which General William Tecumseh Sherman, in going over the road in 1889, pronounced to be the most wonderful example of mountain road building he had ever seen.

Care for War.

France, as well as other belligerents, has learned that weight and height are the two big handicaps on armored cars, truly a page taken from standard automobile experience. Too much weight or armor plate consumes the good in the car. The armored car, as with many other devices, is largely a compromise, a middle course between the heaviest armor that would withstand bullets and the lighter armor that allows speed and a factor of protection. But in this war speed is often more desirable than overprotection, and so France in its latest fleet of armored machines has aimed at highest possible speed at the expense of overarmoring. The wheels are left entirely exposed, as they offer the poorest target—in fact, the enemy will generally endeavor to disable the gun. Light weight and speed reduce this possible danger, in that a swiftly moving car offers a much poorer target than a slower moving vehicle.

CORN ON THE PLAINS

Comparison Is Made of Average Yields and Profits.

Much Importance Is Attached to Fact That Corn Leaves Field in Excellent Condition for the Crop That Is to Follow.

Experience has shown that corn grown for fodder or the silo is at least a safe crop, and perhaps as productive as any that could be grown in the great plains area. The response to the different modes of culture and crop sequence, however, is greater in the southern and central portions of the area than in the northern, according to the new department bulletin, No. 219. Some 14 field stations are situated in the great plains area, which covers ten states, Montana, North Dakota, South Dakota, Wyoming, Nebraska, Colorado, Kansas, Oklahoma, Texas and New Mexico. The climate in this area is often classified as semi-arid, but as the variations in humidity from season to season are so great, some years have a relatively high precipitation and may be followed by years of drought. Thus climate and the distribution of rainfall play a very important part in determining the size of the corn crop. Necessarily, in a bulletin dealing with such a wide expanse of territory, deductions when not applied to a specific station must be very general.

Corn growing possesses merit as a preparation of the land for a crop of small grain. When these two factors, yield of corn or fodder and the influence of the crop on the soil, are combined in one crop, they make its growth of double importance. Corn is the only crop that at present offers this advantage in the great plains area, and which at the same time lends itself to a large acreage and to a general farming system. Potatoes as a crop may have the same effect as corn follow crop, but do not lend themselves so well to growth on a large acreage.

Such crops as spring wheat, oats and barley in the great plains area, when following corn, have consistently given higher yields as compared with other methods of preparing a seedbed for these crops. Very often these small-grain crops have yielded the highest, or approximately the highest, yield when grown on disked corn land, and when the cost of preparation is considered, this plan was also found to be productive of the greatest profit. Therefore, in the growing of corn much importance is attached to the fact that it leaves the field in excellent condition for the crop following.

A striking point brought out in the bulletin is the uniformity in the amount of stover or fodder produced by all methods at the stations in Montana and North Dakota.

Corn on summer-fallowed land, especially at the more southern stations of Garden City, Kan., Dalhart and Amarillo, Tex., showed a marked increase in stover yield over other methods of preparing the soil. The increase, however, was not sufficient to make it the most profitable except at Scottsbluff, Neb.

Corn as a grain crop has not been produced at a profit at eight of the thirteen stations by any method. But when a value of four dollars per ton is assigned to the stover or fodder, corn has been profitably grown by some method at all but one of the stations.

No one method of seedbed preparation stands out as essential to the corn production. Thus the prevailing conditions with relation to farm labor, farm capital, type of soil and weeds to be dealt with are the prime factors in determining differences in practice.

TO SUCCEED WITH ALFALFA

Rather Particular Crop, Requiring Certain Soil Conditions—Wonderful Feed for Stock.

Almost every farmer is interested in growing alfalfa. Some have tried it and failed. Many have succeeded and are reaping the benefits of this wonderful crop for live stock farms.

As a hay crop it excels all others in yields, feeding value, drought resistance and soil enrichment. Yet it is not advisable to attempt to grow alfalfa under all circumstances. It is a rather particular crop, requiring certain soil conditions and proper treatment. The beginner in alfalfa growing must first of all be a student of alfalfa. He must study the crop and learn its requirements. If he is not willing to pay attention to such important details as inoculation, liming, proper seeding methods and cutting at the proper stage, he had better not try to grow alfalfa.

Weeds.

Weeds use up moisture. Weeds use up plant food. Weeds crowd the plants. Weeds shade the crops. Weeds make it difficult for the plant to grow. Weeds make it hard to work the land properly.

To Try Sudan Grass.

Sudan grass is to be tried as a forage crop at the Montana experiment station this year. Last year the station there received a yield of four and one-half tons to the acre in a growing period of 95 days.

Save Needed Moisture.

Conserve the soil moisture, it will be needed later.

EMBALMED in CUSTOMS of 3,000 YEARS AGO



PLACE AT WHICH CHRIST WAS BAPTIZED BY JOHN THE BAPTIST

HAT thin strip upon the eastern coast of the Mediterranean sea, the Holy Land, sacred to the believers of three world-religions, to Christians, Jews and Moslems, and ground wherein were cradled ideals which have made almost all civilization tributary, is a bridge between the Moslem power in Asia Minor and the Moslem power in Egypt, and so assumes strategic importance in the war of the nations. Yet the Holy Land is a land embalmed in the spirit and customs of 3,000 years ago, according to a description of village life there as prepared by John D. Whitling for the National Geographic society.

"Manners and customs which prevailed in Palestine in Biblical days are still unchanged. While the townspeople are losing their ancient customs and quaint costumes, the villagers are, in these things, as they were 3,000 years ago. Three distinct classes inhabit the land; the Fellahs, the agriculturalists, shepherds and village dwellers; and the Madaniyah, who live in the towns and cities and are artisans.

"The present-day villages are located, as a rule, either on the tops of hills, originally for protection, or near some spring or source of water. Many are built upon the foundations of buildings whose origin dates back thousands of years. There does not exist a single example of a peasant village that has been founded in modern times.

"Village streets are crooked, narrow and unpaved. The farmers' houses are crowded close together for protection. These houses consist of one large room, usually square. About two-thirds of the space within is devoted to a raised, masonry platform, some 8 to 19 feet above the ground, and this is the kitchen, storeroom, bedroom and living room of the family. Below this platform, the cattle and flocks are housed, goats and sheep, a few work cattle, and perhaps a donkey or camel.

"Each village has a guest chamber

which is the social center for all the village men, who love companionship and are great gossipers. Each day, by turn, one of the villagers furnishes the coffee, beans and sugar, to be served to the men who gather at the guest chamber. He also supplies the food and bedding if some ordinary guests come along.

"They are, of course, great respecters of persons; so that if a common man happens in, a couple of fried eggs with bread and olives will do for him. If a more important personage arrives, a pair of roast chickens is provided for his supper; but if a still more honored one or a company of men appear, a lamb or kid is killed. The village guestchamber is a club of the village men.

"Children in the peasant families are always welcomed. The father prides himself on his boys. Even the mother prefers them, and when questioned as to the number of her offspring, she will say she has five children and two girls or whatever the numbers may be. This is the more strange since the would-be husband must pay his father-in-law a handsome price for the girl, while boys are a heavy expense, and their wives and weddings are costly affairs.

"Women are looked upon as something inferior. The woman may never call her husband by his first name, but 'Oh father of Ahmed', or whatever the eldest son's name may be. The wife likewise takes the name of her first-born son. The husband will never say 'my wife' or mention her first name, but will say either 'the mother of Ahmed' or 'my family', the relative in my house', 'the forbidden', or the daughter of my uncle'. The reason for this last title is that the village man in the Holy Land marries his first cousin in preference to anyone else, and in fact she cannot marry another if he wants her.

"When the fellah or peasant child is born, its tender skin, without being washed, is rubbed with olive oil and salt. For seven consecutive days it is resoled, and when a week old gets its first bath and is again oiled. In some localities they consider it unsafe to bathe the baby before it is 40 days old. Mortality among the babies is great, and it is not to be wondered at, for in view of the rough treatment they receive, it becomes a question of the survival of the fittest.

"The ways of these village folk, their methods of agriculture, of administration, of household and community, and of sanitation are primitive reminiscences of the days before the coming of Christ. The relics of their villages are piled in great heaps around it, and there left to fester. Their plowing is a bare scratching of the ground with wooden plows, while they thresh their grain by flailing and treading, and mill it in stone mortars.

"The marriage customs of these people are interesting. Young men marry at about twenty, and girls between twelve and sixteen. The son, on coming of marriageable age, picks his wife by choice of sight—no courtship is allowed—when his father arranges all further details. The girl has no voice in the matter. The price of a bride depends on her age, beauty, usefulness and family connections. It ranges, in our money, from \$100 to \$400.

"flash," which continues so long as the key is kept depressed. The dots and dashes of the Morse code are produced by manipulation of the key.—Popular Mechanics.

The Instinct of Precedence.

"Of course, your wife favors votes for women?"

"Yes," replied Mr. Meekton; "but I suspect she'll find it hard to approve of any plan that allows some of the women she knows to vote just the same as she does."

HAS BRAWN IN SPITE OF BRAIN

Winner of Mile Run Explodes Anglo-American Tradition That One Man Can't Have Both.

That the possession of brawn does not necessarily preclude the possession of brains is the lesson taught us by young Norman S. Taber, lately an Oxford Rhodes scholar, who recently in the Harvard stadium established a new world's record of four minutes twelve and three-fifths seconds for the mile run, breaking by three-hundredths of a second the record of four minutes twelve and three-fourths seconds, which was established by W. G. George of England twenty-nine years ago.

Stop watches today record fifth—not fourths—of a second. It may seem like putting too fine a point upon a running race to time it to twentieths of a second; but in this age of specialization nothing is more highly specialized than athletics; and as five of the most reliable watch holders in the country all caught Mr. Taber's time alike, there is little doubt that he fairly tied the record and that technically he certainly broke it.

But, as we said before, the interesting thing about this achievement of wind and muscle is that it was accomplished by a man of more than ordinary intellectual development.

Mr. Taber is an American who, after his graduation from Brown university, went to Oxford as a Rhodes scholar. He was a runner of ability when at Brown, he continued to develop brain and body together at Oxford, and his running has improved as his mind has broadened and matured.

There is a special reason why Americans should be proud of Mr. Taber's achievement, however. Until recently it had been a tradition that, while Americans were supreme in the dashes, and field events, which require tense skill and quick effort rather than endurance, they were usually inferior to their British cousins in the long runs, which require what the Englishman calls "bottom," or what the American youth less euphoniously terms "guts." Mr. Taber has helped to shatter this tradition and vindicate the American staying power.

How Far New York Trains Travel.

The subway and elevated trains in the boroughs of Manhattan and the Bronx, New York city, travel every day a distance of more than twice the circumference of the globe.

tance of nineteen miles when good binoculars were used at the receiving station.

The gas is produced by the ordinary carbide and water, and the tank, which is adjustable to the back of the lantern, is sufficiently large for about three hours of signaling.

When burning normally only enough gas is admitted to the lantern to maintain a minute flame, but when the controlling key is depressed the gas aperture is enlarged and the flame flares up instantly, producing a

USES ACETYLENE IN FOREST

Foresters Utilize It to Flash Messages by Morse Telegraph Code.

The new acetylene signal lantern used in the national forest service for signaling by the Morse telegraphic code works so successfully that messages can be read by the naked eye at a distance of fifteen miles in clear weather, and the lantern has been worked to good advantage over a dis-